



Docket No.: 043888-0267

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of	:	Customer Number: 20277
Tsutomu OHZUKU, et al.	:	Confirmation Number: 9492
Application No.: 10/629,815	:	Group Art Unit: 1745
Filed: July 30, 2003	:	Examiner: LEE, CYNTHIA K

For: POSITIVE ELECTRODE ACTIVE MATERIAL AND NON-AQUEOUS ELECTROLYTE  
SECONDARY BATTERY CONTAINING THE SAME

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection or Notice of Allowance.

05/02/2007 DEMMANU1 00000074 500417 10629815  
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10/629,815

In accordance with 37 CFR 1.17(p), please charge the fee of \$180.00 to Deposit Account No. 500417.

The references were cited in corresponding Japanese and Korean Office Actions and their relevance is discussed therein. Copies of the Japanese and Korean Office Actions are attached for the Examiner's information.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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**Please recognize our Customer No. 20277  
as our correspondence address.**



SHEET 1 OF 3

INFORMATION DISCLOSURE  
CITATION IN AN  
APPLICATION

(PTO-1449)

ATTY. DOCKET NO.

043888-0267

SERIAL NO.

10/629,815

APPLICANT

Tsutomu OHZUKU, et al.

FILING DATE

July 30, 2003

GROUP

1745

## U.S. PATENT DOCUMENTS

## FOREIGN PATENT DOCUMENTS

EXAMINER'S INITIALS	CITE NO.	Foreign Patent Document Country Codes-Number + Kind Codes (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Figures Appear	Translation Yes No
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## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER'S INITIALS	CITE NO.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
		Japanese Office Action issued in Japanese Patent Application No. 2002-303294, dated March 1, 2007
		Japanese Office Action issued in Japanese Patent Application No. 2003-281871, dated February 1, 2007
		Korean Office Action issued in Korean Patent Application No. 10-2006-0100852, dated January 17, 2007
		WEST et al., "Introduction for Solid-State Chemistry," Kodansha-Scientific, March 20, 1996, with partial translation
		YOSHIO et al., "Lithium-ion Secondary Battery," Nikkan Kogyo Shinbunsha, March 29, 1996, with partial translation
		Japanese Society of Microscopy, Kanto Division, "Technique of Electron microscope technique for advanced material evaluation," Asakura-shoten, December 15, 1991, with partial translation
		SAKA, K, "Study of Crystal Electron Microscope," Uchida Rokakuho, November 25, 1997, with partial translation
		NEUDECKER, B.J. et al., "Lithium Manganese Nickel Oxides $\text{Li}_x(\text{Mn}_y\text{Ni}_{1-y})_{2-x}\text{O}_2$ ," J. Electrochem. Soc., December 1998, pg 4148-1459, Vol. 145, No. 12, The Electrochemical Society, Inc.
		YOSHIO, M. et al., "Preparation and properties of $\text{LiCo}_y\text{Mn}_x\text{Ni}_{1-x-y}\text{O}_2$ as a cathode for lithium ion batteries," Journal of Power Sources, August 17, 1998, pg 176-181, Vol. 90, Elsevier
		KATO, M., "Analysis of X-ray diffraction," Uchida Rokakuho, April 20, 1990, with partial translation
		ABRAHAM, et al., "Surface changes on $\text{LiNi}_{0.8}\text{Co}_{0.2}\text{O}_2$ particles during testing of high power lithium-ion cells," Electrochemistry Communications, May 2002, pg 620-625, Vol. 4, Elsevier
		LU et al., "Superlattice Ordering of Mn, Ni, and Co in Layered Alkali Transition Metal Oxides with P2, P3, and O3 Structures," Chem. Mater, pg 3583-3590, Vol. 12, American Chemical Society
		TERADA, Y. et al., "In Situ XAFS Analysis of $\text{Li}(\text{Mn}, \text{M})_2\text{O}_4$ (M=Cr, Co, Ni) 5V Cathode Materials for Lithium-Ion Secondary Batteries," Journal of Solid State Chemistry, February 2001, pg. 286-291, Vol. 156 Issue 2, Academic Press
		LU, Z. et al., "Layered $\text{Li}[\text{Ni}_x\text{Co}_{1-2x}\text{Mn}_x]\text{O}_2$ Cathode Materials for Lithium-Ion Batteries," Electrochemical and Solid-State Letters, pg A200-A203, Vol. 12, The Electrochemical Society, Inc.
		LU, Z. et al., "Layered Cathode Materials $\text{Li}[\text{Ni}_x\text{Li}_{1/3-2x/3}\text{Mn}_{2/3-x/3}]\text{O}_2$ for Lithium-Ion Batteries," Electrochemical and Solids-Sate Letters, 2001, pg A191-A194, Vol. 4, The Electrochemical Society, Inc.
		PARK, H. et al., "Relationship between Chemical Bonding Character and Electrochemical Performance in Nickel-Substituted Lithium Manganese Oxides," J. Phys. Chem., 05-03-2001, pg 4860-4866, Vol. 105, American Chemical Society

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b>  (PTO-1449)				ATTY. DOCKET NO. <b>043888-0267</b>		SERIAL NO. <b>10/629,815</b>	
				APPLICANT <b>Tsutomu OHZUKU, et al.</b>			
				FILING DATE <b>July 30, 2003</b>		GROUP <b>1745</b>	
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER'S INITIALS	CITE NO.	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document		Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
<b>FOREIGN PATENT DOCUMENTS</b>							
EXAMINER'S INITIALS	CITE NO.	Foreign Patent Document Country Code <sup>3</sup> -Number 4-Kind Codes (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document		Pages, Columns, Lines Where Relevant Figures Appear	
		EP 1 309 022 A2	05-07-2003	MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.		Corresponds to JP 2003-203633	
		EP 0 989 622 A1	03-29-2000	SANYO ELECTRIC CO., LTD.		X	
		WO 02/40404				Corresponds to US 2005/0260496	
		JP 2003-203633 A	07-18-2003	MATSUSHITA ELECTRIC IND CO LTD		Corresponds to EP 1 309 022 A2	
		JP 2002-338250	11-27-2002	MITSUBISHI CHEMICALS CORP		JAPAN (w/English abstract)	
		JP 11-339802	12-10-1999	MATSUSHITA ELECTRIC IND CO LTD		JAPAN (w/English abstract)	
		JP 2000-082466	03-21-2000	NIPPON CHEM IND CO LTD		JAPAN (w/English abstract)	
		JP 3244314	10-31-1991	KUBOTA KK		(partial English translation)	
		JP 2003-137555	05-14-2003	MITSUBISHI CHEMICALS CORP		JAPAN (w/English translation)	
		KR 2000-0017619	03-29-2000			Corresponds to US 6,291,107	
<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
EXAMINER'S INITIALS	CITE NO.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
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		US 6,168,887 B1	01-02-2001	Dahn et al.			
		US 6,436,577 B1	08-20-2002	Kida et al.			
		US 6,808,848 B2	10-26-2004	Nakanishi et al.			
		US 5,626,635	05-06-1997	Yamaura et al.			
		US 2003/0082448 A1	05-01-2003	Cho et al.			
		US 6,045,771	04-04-2000	Matsubara et al.			
		US 7,078,128 B2	07-18-2006	LU et al.			
		US 2004/0058243 A1	03-25-2004	Ohzuku et al.			
		US 2003/0082452 A1	05-01-2003	UEDA et al.	Corresponds to JP 2003-238165		
		US 6,291,107 B1	09-18-2001	SHIMIZU et al.	Corresponds to KR 2000-0017619		
		US 2004/0058243 A1	03-25-2004	OHZUKU et al.			
		US 2003/0087154 A1	05-08-2003	Ohzuku et al.	Corresponds to JP 2003-203633		
<b>FOREIGN PATENT DOCUMENTS</b>							
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